

# **Success Stories**

## **Dynamic Duo for In-Vehicle Surveillance Excellence**

Transforming In-Vehicle Surveillance with Winmate USB-Type C Display and ARM Box PC



#### Background

A leading transportation company faced challenges in enhancing the surveillance capabilities of its fleet for improved security and operational efficiency. The need for a robust and versatile in-vehicle surveillance system prompted them to seek an advanced solution capable of real-time monitoring, data processing, and reliable connectivity.

### **Core Products**

- IM30SB3-101 ARM A53 M Series Box PC
- <u>W15L100-PTA3-C</u> 15.6" USB Type-C Chassis Display

#### **Main Challenges**

In a mobile environment, vehicles experience vibrations and varying environmental conditions. Ensuring the durability and stability of the USB-Type C Display and ARM Box PC under such circumstances was a primary challenge.

Vehicles often encounter power fluctuations, which could impact the reliable operation of electronic components. The challenge was to design a solution that could withstand these fluctuations and ensure continuous operation.

Integrating the new surveillance solution seamlessly with the existing infrastructure posed a challenge. Compatibility with the surveillance cameras, sensors, and other components required careful consideration and adaptation.

#### Why Winmate

Winmate's USB-Type C Display and ARM Box PC emerged as the ideal solution for the in-vehicle surveillance application. The USB-Type C Display, with its high-resolution screen and versatile connectivity options, provided crisp and clear visuals, ensuring optimal visibility for monitoring activities. The ARM Box PC, equipped with powerful processing capabilities, offered efficient data handling and storage for the surveillance system.

The USB-Type C connectivity facilitated a simple and reliable interface between the display and the ARM Box PC, reducing cable clutter and ensuring a robust connection. This solution was designed to withstand the challenges of a mobile environment, including vibrations, temperature variations, and power fluctuations.

In the In-Vehicle Surveillance application, Winmate's solution seamlessly integrated with the existing surveillance infrastructure. The USB-Type C Display served as the central monitoring interface, providing real-time footage, GPS data, and system diagnostics. Simultaneously, the ARM Box PC processed and stored data efficiently, ensuring that critical information was readily available and accessible. The surveillance system allowed for continuous monitoring of the vehicle and its surroundings, enhancing security and providing valuable insights for fleet management. The solution's adaptability to varying lighting conditions and its durability in challenging environments proved instrumental in meeting the client's requirements.

**Application Diagram** 



### **Related Products**



#### Winmate IM30SB3-101

- ARM A53 M Series Box PC
- ARM A53 Quad Core 2.0GHz CPU
- 4GB LPDDR4, 32GB eMMC
- Supports 1xCOM, 2xUSB 2.0, 1xMicro USB, 1xLAN ,1xSD slot
- Elegant and slim mechanical design
- Support Android or Linux operating system



#### Winmate W15L100-PTA3-C

- 15.6" 1920 x 1080 USB Type-C Chassis Display
- USB Type-C connector
- Chassis
- VESA mount
- PCAP touch
- Front IP65